The Texas Commission on Environmental Quality (commission) adopts new §§101.501 - 101.504, 101.506, and 101.508. Sections 101.504, 101.506, and 101.508 are adopted *with changes* to the proposed text as published in the March 17, 2006, issue of the *Texas Register* (31 TexReg 1872). Sections 101.501 - 101.503 are adopted *without changes* to the proposed text and will not be republished.

The new sections will be submitted to the United States Environmental Protection Agency (EPA) as revisions to the state implementation plan (SIP).

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULES
On May 12, 2005, EPA promulgated the Clean Air Interstate Rule (CAIR) to assist nonattainment areas in downwind states in achieving compliance with the national ambient air quality standards
(NAAQS) for particulate matter less than or equal to 2.5 microns (PM_{2.5}) and eight-hour ozone.

Twenty-eight eastern states and the District of Columbia were identified as upwind contributors to the nonattainment of the PM_{2.5} and eight-hour ozone NAAQS prompting the requirement for the reduction in emissions of sulfur dioxide (SO₂) and/or oxides of nitrogen (NO_x). Twenty-three states, including
Texas, and the District of Columbia were found to contribute to the downwind nonattainment of the
PM_{2.5} NAAQS and are required to make reductions in annual emissions of SO₂ and NO_x. Twenty-five states and the District of Columbia, not including Texas, were found to contribute to the downwind nonattainment of the eight-hour ozone NAAQS and are required to reduce ozone-season NO_x emissions. EPA modeled 37 states, including Texas, for PM_{2.5} contribution using the Community Multiscale Air Quality Model. A criterion of 0.2 micrograms per cubic meter (μg/m³) was used for

determining whether SO₂ and NO_x emitted in one state made a significant contribution to PM_{2.5} nonattainment in another state. State-by-state, zero-out modeling was then used to quantify the state's contribution for SO₂ and NO_x. EPA's modeling demonstrated that Texas provided a contribution of 0.29 µg/m³ with two downwind "linkages," Madison County, Illinois and St. Clair County, Illinois. For ozone contribution, 31 states in the eastern United States were modeled. Since Texas was not included in the ozone modeling exercise, EPA did not determine that Texas contributed to ozone nonattainment in another state.

The NO_x and SO_2 reduction requirements under CAIR are being implemented in two phases by providing states with declining budgets. For NO_x , Phase I begins in 2009 and continues through the year 2014 with Texas receiving an initial NO_x budget of 181,014 tons annually. The Phase II NO_x budget will begin in 2015, with Texas receiving 150,845 tons annually. State SO_2 budgets are based on the allowance allocations provided under Federal Clean Air Act (FCAA), Title IV. Annual state budgets for Phase I, 2010 - 2014, are based on a 50% reduction of Title IV allowances allocated in the affected state. The initial SO_2 budget for Texas during Phase I is 320,946 tons. For Phase II, 2015 and thereafter, SO_2 budgets are based on a 65% reduction of Title IV allowances allocated in the affected state, with Texas receiving 224,662 tons.

EPA provided states with two compliance options for meeting the reduction requirements under CAIR:

1) meet the state's emission budget by requiring electric generating units (EGUs) to participate in an EPA-administered interstate cap and trade program; or 2) meet an individual state emissions budget through measures of the state's choosing. The 79th Legislature, 2005, enacted House Bill (HB) 2481,

§2 (codified at Texas Health and Safety Code (THSC), Texas Clean Air Act (TCAA), §382.0173), requiring Texas to participate in the EPA-administered interstate cap and trade program through the incorporation by reference of the CAIR model trading rule. HB 2481 also provided specific direction for the methodology to be used in allocating the NO_x trading budget provided to Texas, identified an amount of CAIR NO_x allowances to be set aside for new sources, and specified that reductions associated with CAIR would only be required from new and existing EGUs and not from other sources of SO₂ and NO_x emissions.

HB 2481 amended THSC, Chapter 382 by adding §382.0173. THSC, §382.0173(a) requires that the commission adopt rules "incorporat{ing} by reference 40 CFR Subparts AA through II and Subparts AAA through III of Part 96 and 40 CFR Subpart HHHH of Part 60." Additionally, THSC, §382.0173(b) requires the commission to "make permanent allocations that are reflective of the allocation requirements of 40 CFR Subparts AA through HH and Subparts AAA through HHH of Part 96 and 40 CFR Subpart HHHHH of Part 60 . . . at no cost . . . using the {EPA's} allocation method as specified by Section 60.4142(a)(1)(I), as issued by that agency on May 12, 2005, or 40 CFR Section 96.142(a)(1)(I), as issued by that agency on May 18, 2005, as applicable with the exception of nitrogen oxides which shall be allocated according to the additional requirements of Subsection (c)." THSC, §382.0173(c) provides additional requirements regarding NO_x allocations, specifically a requirement to maintain a special reserve of allocations for certain units, and requirements relating to establishing allocations for specific control periods. THSC, §382.0173(d) provided that its provisions applied only while the federal rules were enforceable and that the provisions of HB 2481 do "not limit the authority of the commission to implement more stringent emissions control requirements."

The commission interprets these requirements together in order to provide effect to the expressed intent of the legislature. Specifically, the commission interprets the language of new THSC, §382.0173(d) as not restricting existing authority to require further emissions control requirements, but not to interfere with, or change, the requirements of the CAIR NO_x and SO₂, or the Clean Air Mercury Rule (CAMR) mercury emission trading programs. The legislature expressed clear intent that the commission implement the CAIR and CAMR emission trading programs by requiring the incorporation by reference of the CAIR and CAMR program rules as promulgated by EPA, and requiring the use of EPA-specified allocation methodology, with some exceptions for CAIR NO_x allowances.

Under 40 Code of Federal Regulations (CFR) Part 96, EPA promulgated a model rule for the CAIR NO_x Annual Trading Program. This model rule is a market-based cap and trade system designed to reduce the costs of complying with the new NO_x and SO₂ reduction requirements. The CAIR model rule designates respective budgets for annual NO_x and SO₂ emissions within each state to be applied to all fossil fuel-fired boilers and turbines serving an electrical generator with a nameplate capacity greater than 25 megawatts of electricity (MWe) and producing electricity for sale. The model rule provides flexibility in complying with the NO_x and SO₂ reduction requirements through the unrestricted banking of excess allowances and the trading of allowances between EGUs in affected CAIR states under common caps. For example, EGUs in Texas will be allowed to trade NO_x allowances with other CAIR states participating in the CAIR NO_x Annual Trading Program, while the trading of SO₂ allowances will be permissible with CAIR states participating in the CAIR SO₂ Trading Program or the Title IV SO₂ Allowance Trading Program. The model rule provides states flexibility in the allocation methodology used to determine CAIR NO_x allowance allocations for each CAIR NO_x unit. CAIR

states are then responsible for submitting the CAIR NO_x allowance allocations to EPA for recordation. CAIR SO₂ allowance allocations are distributed by EPA based on the CAIR source's Title IV SO₂ allowance allocation. Under the CAIR model rule, EPA takes responsibility for establishing CAIR compliance accounts for each CAIR source and maintaining an allowance tracking system to record the deposit, transfer, and deduction for compliance of all CAIR allowances. CAIR sources are required, under the model rule, to demonstrate compliance through the installation and operation of continuous emissions monitoring systems as required under 40 CFR Part 75. Finally, the model rule requires all elements of the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program to be federally enforceable through the issuance of a CAIR permit as a complete and separable portion of the CAIR source's Title V permit.

As directed by HB 2481, the commission is adopting rules under Chapter 101, Subchapter H, Division 7 to incorporate 40 CFR Part 96, Subpart AA - Subpart II and Subpart AAA - Subpart III by reference for the purpose of complying with the CAIR. In addition, the commission is adopting specific rules under Subchapter H, Division 7 regarding the methodologies and procedures for determining each CAIR NO_x source's CAIR NO_x allowance allocation in lieu of the CAIR NO_x allowance allocation methodologies and procedures under 40 CFR Part 96, Subpart EE. The adopted rules apply to EGUs that are defined as a stationary, fossil fuel-fired boiler or a stationary, fossil fuel-fired combustion turbine serving at any time, since the startup of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe and producing electricity for sale. The adopted rules also apply to cogeneration units serving at any time a generator with nameplate capacity of more than 25 MWe and supplying in any calendar year more than one-third of the unit's potential electric output

capacity or 219,000 megawatts hours (MWh), whichever is greater, to any utility power distribution system for sale.

The adopted rules distribute the NO₂ trading budget provided to Texas to each CAIR NO₂ unit based on the specific direction provided under HB 2481. A total amount of CAIR NO, allowances equal to 9.5% of the Texas NO_x trading budget will be set-aside as a special reserve for distribution to new units commencing operation on or after January 1, 2001. The remaining 90.5% of the Texas NO_x trading budget will be distributed to units having commenced operation before January 1, 2001, based on a three-year average of the unit's historical heat input adjusted for the type of fuel burned. In performing the fuel adjustment, a unit's historical heat input will be multiplied by the following: 90% for coal-fired, 50% for natural gas-fired, and 30% for all other fossil fuels. The adopted rules will also incorporate an allocation update beginning with the 2016 control period, and for the control period beginning every five years thereafter. The allocation update will adjust the baseline heat input used in determining the CAIR NO_x allowance allocation for each CAIR NO_x unit. In addition to the Texas NO_x trading budget, the CAIR model trading rule provides an additional pool of allowances available for allocation in the 2009 control period to those CAIR NO, units achieving early NO, reductions in 2007 and 2008, or whose compliance with the CAIR NO_x reduction requirements for the 2009 control period will create undue risk to the reliability of electricity supply during the year 2009. This pool of NO_x allowances, the compliance supplement pool, equates to an additional 772 tons for Texas. The adopted rules specify the requirements for a compliance supplement pool allowance request by CAIR NO_x sources.

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules

Rule Project No. 2005-046-101-EN

The commission is concurrently adopting an additional rulemaking to 30 TAC Chapter 122, Federal Operating Permits Program, in this issue of the *Texas Register* to implement HB 2481. The commission is also adopting a CAIR SIP, rules to implement CAMR, and a CAMR state plan.

SECTION BY SECTION DISCUSSION

SUBCHAPTER H, EMISSIONS BANKING AND TRADING

Division 7, Clean Air Interstate Rule

Section 101.501, Applicability

Adopted new §101.501 states that the requirements of Subchapter H, Division 7 apply to any stationary, fossil fuel-fired boiler or stationary, fossil fuel-fired combustion turbine meeting the applicability requirements under 40 CFR Part 96, Subpart AA or Subpart AAA. 40 CFR Part 96, Subpart AA and Subpart AAA define applicable units as stationary, fossil fuel-fired boilers or combustion turbines serving at any time, since the startup of the unit's combustion chamber, a generator with a nameplate capacity of more than 25 MWe producing electricity for sale. The referenced applicability also includes cogeneration units serving at any time a generator with a nameplate capacity of more than 25 MWe and supplying in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale.

Section 101.502, Clean Air Interstate Rule Trading Program

Adopted new §101.502 incorporates by reference, with the exception of the requirements specified under Subchapter H, Division 7, the CAIR trading programs for annual NO_x and SO₂ codified under

40 CFR Part 96, Subpart AA - Subpart II and Subpart AAA - Subpart III finalized on May 12, 2005. The section requires owners and operators of sources subject to 40 CFR Part 96, Subpart AA - Subpart III or Subpart AAA - Subpart III to comply with the requirements of those subparts. The new section also specifies that the methodologies and procedures for determining CAIR NO_x allowance allocations in 40 CFR Part 96, Subpart EE are replaced by the requirements of this division.

The requirements of 40 CFR Part 96, Subpart AA - Subpart II relate to the CAIR NO_x Annual Trading Program. Specifically, 40 CFR Part 96, Subpart AA describes the general provisions of the CAIR NO_x Annual Trading Program, including definitions; applicability; an exemption from the permitting, monitoring, and reporting requirements of the program for retired units; and standard procedural requirements of the program. 40 CFR Part 96, Subpart BB outlines the procedures for the authorization of and the responsibilities of the CAIR designated representative and alternate CAIR designated representative for a CAIR NO_x source. The CAIR designated representatives or alternates represent and, through their representations, actions, inactions, or submissions, legally bind each owner and operator of a CAIR NO_x source in all matters pertaining to the CAIR NO_x Annual Trading Program. 40 CFR Part 96, Subpart CC describes the requirement for each CAIR NO, source to apply for and obtain a CAIR permit containing all applicable CAIR NO, Annual Trading Program requirements for each CAIR NO_x unit at the source. The CAIR permit is required to be a complete and separable portion of the CAIR NO_x source's Title V operating permit. 40 CFR Part 96, Subpart EE outlines the methods and procedures for determining CAIR NO_x allowance allocations, including the annual CAIR NO_x trading budgets for each state. The methods and procedures identified in 40 CFR Part 96, Subpart EE are replaced by the requirements of this division. 40 CFR Part 96, Subpart

FF describes the CAIR NO_x allowance tracking system, the methods for establishing compliance and general accounts, the recording of CAIR NO_x allowance allocations into a CAIR NO_x source's compliance account, the procedures for deducting allowances for compliance, and the banking of CAIR NO_x allowances. Deductions for compliance are based on the monitoring and reporting requirements under 40 CFR Part 96, Subpart HH, with "penalty" deductions for exceeding the amount of allowances held in a compliance account being equal to three times the number of tons in excess. 40 CFR Part 96, Subpart GG describes the procedures for the submission and recordation of CAIR NO_x allowance trades. 40 CFR Part 96, Subpart HH provides the requirements for emissions monitoring, initial certification and recertification procedures for monitors, recordkeeping, and reporting.

40 CFR Part 96, Subpart II describes the opt-in provisions for the CAIR NO_x Annual Trading Program. The opt-in provisions apply to any unit that is not already a CAIR NO_x unit under 40 CFR §96.104 or covered by a retired unit exemption; has or is qualified to have a Title V operating permit; vents all emissions to a stack; and can meet the monitoring, recordkeeping, and reporting requirements of 40 CFR Part 96, Subpart HH. CAIR NO_x opt-in units are required to apply for and obtain a CAIR permit as prescribed under 40 CFR Part 96, Subpart CC. Units electing to opt-in to the CAIR NO_x Annual Trading Program must monitor and report the NO_x emission rate and heat input of the unit in accordance with the monitoring and reporting requirements of 40 CFR Part 96, Subpart HH for the entire control period prior to the date that the unit elects to enter the CAIR NO_x Annual Trading Program. The baseline heat input and baseline emission rate for each CAIR NO_x opt-in unit is dependent upon the number of control periods for which the unit has monitored and reported heat input and emission rate data in accordance with 40 CFR Part 96, Subpart HH. If the unit has monitored and

reported for only one control period, the baseline heat input and emission rate shall be the unit's total heat input and NO_x emission rate for the control period immediately preceding the date that the unit elects to opt-in. For units that have monitored and reported for more than one control period, the baseline heat input and emission rate shall be the average of the most recent three-year period. The opt-in provisions of 40 CFR Part 96, Subpart II allow opt-in units to choose from two different allocation methods for receiving an allocation of CAIR NO_x allowances. The general approach allocates CAIR NO_x allowances to opt-in units at 70% of their baseline NO_x emission rate with no additional reductions required after the 2009 control period. An alternative approach allocates CAIR NO_x allowances at the baseline levels for the 2009 - 2014 control periods, but requires deeper reductions starting in 2015. The CAIR NO_x allowance allocation for each control period beginning in 2015, and thereafter, is based on a NO_x emission rate equal to the lesser of 0.15 lb of NO_x/million British thermal units (MMBtu), the unit's baseline emission rate, or the most stringent state or federal NO_x emission limit applicable for any time during the applicable control period. Owners or operators of units may elect to opt-in to the CAIR NO_x Annual Trading Program without electing to opt-in to the CAIR SO₂ Trading Program and may withdraw from participation in the CAIR NO₃ Annual Trading Program after five years of participation.

The requirements of 40 CFR Part 96, Subpart AAA - Subpart III relate to the CAIR SO₂ Trading Program and closely mirror the requirements for the CAIR NO_x Annual Trading Program under 40 CFR Part 96, Subpart AA - Subpart II. An element unique to the CAIR SO₂ Trading Program is the program's interaction and coordination with the Title IV SO₂ Trading Program. Under the CAIR SO₂ Trading Program, states have no discretion in the approach to the allocation of SO₂ allowances because

EPA is basing the CAIR SO₂ allowance allocations on the SO₂ allocations already provided under the Title IV SO₂ Trading Program. Compliance with the CAIR SO₂ Trading Program is coordinated with the Title IV SO₂ Trading Program through requiring the use of Title IV SO₂ allowances for compliance with the CAIR SO₂ Trading Program at increasing ratios. Title IV SO₂ allowances allocated for 2010 -2014 are retired for compliance with the CAIR SO₂ Trading Program at a ratio of two allowances per ton of emissions. SO₂ allowances allocated for 2015, and thereafter, are retired for compliance at a ratio of 2.86 allowances per ton of emissions. Title IV SO₂ allowances allocated for years prior to 2010 may be used for compliance with the CAIR SO₂ Trading Program at a ratio of one allowance per ton of emissions. SO₂ allowances are freely transferrable between sources covered by the Title IV SO₂ Trading Program and sources covered by the CAIR SO₃ Trading Program.

40 CFR Part 96, Subpart AAA describes the general provisions of the CAIR SO₂ Trading Program including definitions; applicability; an exemption for retired units; and standard procedural requirements of the program. 40 CFR Part 96, Subpart BBB outlines the procedures for the authorization of and the responsibilities of the CAIR designated representative and alternate CAIR designated representative for a CAIR SO₂ source. 40 CFR Part 96, Subpart CCC describes the requirement for each CAIR SO₂ source to apply for and obtain a CAIR permit containing all applicable CAIR SO₂ Trading Program requirements for each CAIR SO₂ unit at the source. 40 CFR Part 96, Subparts DDD and EEE are reserved. 40 CFR Part 96, Subpart FFF describes the CAIR SO₂ allowance tracking system, establishment of compliance accounts and general accounts, recordation of CAIR SO₂ allowance allocations, procedures for deducting allowances for compliance, and the banking of CAIR SO₂ allowances. Deductions for compliance are based on the monitoring and reporting

requirements under 40 CFR Part 96, Subpart HHH, with "penalty" deductions for exceeding the amount of allowances held in a compliance account being equal to three times the number of tons in excess.

The deduction of SO₂ allowances outlined under 40 CFR Part 96, Subpart FFF for compliance with the CAIR SO₂ Trading Program is determined in two steps. First, CAIR SO₂ allowances are deducted at a 1:1 ratio for compliance with the Title IV SO₂ Trading Program. Secondly, any additional deductions for compliance with the CAIR SO₂ Trading Program are made at the applicable ratio for the vintage year allowance being deducted. For example, a CAIR SO₂ unit emits 100 tons of SO₂ in the 2012 control period. The compliance account for the CAIR SO₂ unit holds 70 vintage 2009 allowances and 60 vintage 2012 allowances. For compliance with the Title IV SO₂ Trading Program, 70 vintage 2009 allowances and 30 vintage 2012 allowances are deducted to cover the 100 tons of emissions, leaving an excess of 30 vintage 2012 allowances. However, for CAIR, the tonnage equivalent for the deduction to comply with the Title IV SO₂ Trading Program is 85 allowances (70 vintage 2009 allowances and 30 vintage 2012 allowances used at a 2:1 ratio). The remaining 30 vintage 2012 allowances not needed for compliance with the Title IV SO₂ Trading Program are deducted from the compliance account at a 2:1 ratio to make up the 15-ton difference for compliance with the CAIR.

40 CFR Part 96, Subpart GGG describes the procedures for submitting and recording CAIR SO₂ allowance trades. 40 CFR Part 96, Subpart HHH provides the requirements for emissions monitoring, certification and recertification of monitors, recordkeeping, and reporting. 40 CFR Part 96, Subpart III describes the opt-in provisions for the CAIR SO₂ Trading Program. The opt-in provisions apply to

an owner or operator of a unit that is not already a CAIR SO₂ unit under 40 CFR §96.204 or that is/that is not covered by a retired unit exemption; has or is qualified to have a Title V operating permit; vents all emissions to a stack; and can meet the monitoring, recordkeeping, and reporting requirements of 40 CFR Part 96, Subpart HHH. Owners or operators of CAIR SO₂ opt-in units are required to apply for and obtain a CAIR permit as prescribed under 40 CFR Part 96, Subpart CCC. Owners or operators of units electing to opt-in to the CAIR SO₂ Trading Program are required to monitor and report the SO₂ emission rate and heat input of the unit in accordance with the monitoring and reporting requirements of 40 CFR Part 96, Subpart HHH for the entire control period prior to the date that the unit elects to enter the CAIR SO₂ Trading Program. The baseline heat input and baseline emission rate for each CAIR SO₂ opt-in unit is dependent upon the number of control periods for which the unit has monitored and reported heat input and emission rate data in accordance with 40 CFR Part 96, Subpart HHH. If the owners or operators of a unit have monitored and reported for only one control period, the baseline heat input and emission rate shall be the unit's total heat input and SO₂ emission rate for the control period immediately preceding the date that the unit elects to opt-in. For owners or operators of units that have monitored and reported for more than one control period, the baseline heat input and emission rate shall be the average of the most recent three-year period. The opt-in provisions of 40 CFR Part 96, Subpart III allow owners or operators of opt-in units to choose from two different allocation methods for receiving an allocation of CAIR SO₂ allowances. The general approach allocates CAIR SO₂ allowances to opt-in units at 70% of their baseline SO₂ emission rate with no additional reductions required after the 2010 control period. An alternative approach allocates CAIR SO₂ allowances at the baseline levels for the 2010 - 2014 control periods, but requires deeper reductions starting in 2015. The CAIR SO₂ allowance allocation for each control period beginning in

2015, and thereafter, is based on an SO₂ emission rate equal to the lesser of the unit's baseline emission rate multiplied by 10% or the most stringent state or federal SO₂ emission limit applicable for any time during the applicable control period. Owners or operators of units may elect to opt-in to the CAIR SO₂ Trading Program without electing to opt-in to the CAIR NO_x Annual Trading Program and may withdraw from participation in the CAIR SO₂ Trading Program after five years of participation.

Section 101.503, Clean Air Interstate Rule Oxides of Nitrogen Annual Trading Budget

Adopted new §101.503 specifies that the NO_x trading budget for annual allocations of CAIR NO_x

allowances for each control period in 2009 - 2014 and for 2015, and thereafter, are equivalent to the

tons of NO_x emissions listed for Texas in the state trading budget under 40 CFR §96.140. As finalized

on May 12, 2005, 40 CFR §96.140 provides Texas with an annual NO_x trading budget of 181,014 tons

for each control period in 2009 - 2014, and 150,845 tons for each control period in 2015, and

thereafter. The adopted rule also reserves an amount of CAIR NO_x allowances equivalent to 9.5% of

the Texas NO_x trading budget for allocation to new units. This new unit set-aside equates to 17,196

tons of CAIR NO_x allowances for each control period in 2009 - 2014, and 14,330 tons of CAIR NO_x

allowances for each control period in 2015, and thereafter.

Section 101.504, Timing Requirements for Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations

New §101.504 outlines the deadlines by which the executive director shall submit to EPA the CAIR NO_x allowance allocations for each CAIR NO_x unit subject to this division. The adopted rule requires the executive director to submit to EPA by October 31, 2006, the CAIR NO_x allowance allocations for

the 2009 - 2014 control periods, as determined under §101.506(c) for CAIR NO_x units with a historical baseline heat input. Based on comment, the required deadlines for submittal to EPA of the CAIR NO_x allowance allocations under §101.504(a)(2) - (4) were revised from June 1 to October 31 on the basis that historically the Acid Rain data to be used in determining the proper allocations for future control periods is not available until well after the June 1 time period. The commission notes that preliminary Acid Rain data from the previous control period is typically available by June of the following year, however, this data may be revised by a source prior to the data being finalized. In order to avoid any potential complications with revised data impacting the allocation of CAIR NO_x allowances, the commission is electing to delay submittal of CAIR NO, allowance allocations until such allocations can be based on final Acid Rain data. In addition, an October 31 deadline date is consistent with the submittal deadline date for the 2009 - 2014 control periods under §101.504(a)(1) and with the submittal deadline date for CAIR NO, allocations from the new unit set-aside under §101.504(b). As a result, the adopted rule requires submittal to EPA of the CAIR NO_x allowance allocations determined under §101.506(c) for the 2015 control period by October 31, 2011, and for the 2016 control period by October 31, 2014. Beginning with the 2017 control period, and for each control period thereafter, the CAIR NO_x allowance allocations determined under §101.506(c) shall be submitted to EPA 14 months prior to each applicable control period. For example, the CAIR NO_x allowance allocations determined under §101.506(c) for the 2017 control period shall be submitted to EPA by October 31, 2015, 14 months prior to January 1, 2017. The adopted deadline for submittal of the CAIR NO_x allowance allocations for the 2016 control period, and for each control period thereafter, allows for a minimum lead time of no more than 14 months between recordation of the allocation by EPA and the start of the applicable control period. This lead time is in conflict with the required minimum lead time of three

years provided under 40 CFR §51.123(o)(2)(ii) for states declining the adoption of the allocation provisions under 40 CFR Part 96, Subpart EE. However, the submittal deadline is consistent with HB 2481, requiring the update of the baseline heat input used in determining the CAIR NO_x allowance allocations for CAIR NO, units in Texas. HB 2481 states that beginning with the 2016 control period, and for each control period beginning every five years thereafter, the baseline heat input for all affected CAIR NO_x units must be updated to reflect the average of the three highest amounts of the unit's adjusted control period heat input during control periods one through five of the previous seven control periods. For example, the baseline period for determining CAIR NO_x allowance allocations for the 2016 control period would be the average of the unit's three highest amounts of adjusted heat input from the 2009 - 2013 control periods. To meet the required three-year minimum lead time under 40 CFR §51.123(o)(2)(ii), the allocations for the 2016 control period must be submitted no later than January 1, 2013. Therefore, the federal requirement does not allow for the completion of the baseline period mandated under HB 2481. The deadline for submission of CAIR NO_x allowance allocations 14 months in advance of each control period beginning in 2016, and thereafter, allows for the completion of the mandated baseline period, as well as provides time for the executive director to determine the updated CAIR NO_x allowance allocations and submit the updated allocations to EPA.

New §101.504 also specifies the deadline for submission of CAIR NO_x allowance allocations by the executive director to EPA for allowances distributed from the new unit set-aside. For the 2009 control period, and for each control period thereafter, the CAIR NO_x allowance allocations determined under §101.506(d) and (e) shall be submitted to EPA by October 31 of that control period. The new rule also describes the manner in which EPA will allocate CAIR NO_x allowances should the executive director

fail to submit the allocations by the deadlines in §101.504(a). Should the CAIR NO_x allowance allocations not be provided to EPA by the applicable deadlines in §101.504(a) for each control period, in accordance with 40 CFR §96.141, EPA will assume that the CAIR NO_x allowance allocations for the applicable control period are the same as for the immediately preceding control period. If the applicable control period is 2015, EPA will assume the CAIR NO_x allowance allocations equal 83% of the allocations for the 2014 control period. For units receiving allocations under §101.506(d) and (e), if the executive director fails to submit the CAIR NO_x allowance allocations by the applicable deadline in §101.504(b), EPA will assume that no CAIR NO_x allowances are to be allocated, for the applicable control period, to any CAIR NO_x unit that is otherwise receiving an allocation from the new unit set-aside.

Section 101.506, Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations

Adopted new §101.506 describes the methodology to be used in distributing CAIR NO_x allowances, in tons, for each CAIR NO_x unit subject to this division. For units commencing operation before January 1, 2001, CAIR NO_x allowances are allocated based on a three-year average historical heat input, in MMBtu, adjusted for the type of fuel burned. For each control period in 2009 - 2015, the baseline heat input for units commencing operation before January 1, 2001, will be the average of the three highest amounts of the unit's historical heat input, adjusted for fuel type, from calendar years 2000 - 2004. Beginning with the 2016 control period, and for the control period beginning every five years thereafter, the baseline heat input for units commencing operation prior to January 1, 2001, will be adjusted to reflect the average of the three highest amounts of the unit's control period heat input, adjusted for fuel type, from control periods one through five of the previous seven control periods.

The fuel type adjustments are performed by multiplying a unit's baseline heat input by the following: 90% for coal-fired, 50% for natural gas-fired, and 30% for all other fossil fuels.

For units commencing operation on or after January 1, 2001, CAIR NO, allowances are allocated for each control period in 2009 - 2014 from the new unit set-aside identified under \$101.503(b). Beginning with the 2015 control period, units commencing operation on or after January 1, 2001, and operating each calendar year for a period of five or more consecutive years will be eligible to receive their CAIR NO_x allowance allocation from the general NO_x trading budget on a modified output basis. The baseline heat input will be the average of the three highest amounts of the unit's total converted control period heat input from the first five years of operation. In response to comment, the rule was revised to delete the phrase "and for each control period thereafter" from subsection (b)(2) to eliminate the possibility of two conflicting baseline periods applying to units commencing operation on or after January 1, 2001, and operating for five or more consecutive years, for the 2016 control period, and for every fifth control period thereafter. Beginning with the 2016 control period, and for the control period beginning every five-year period after 2016, the baseline heat input will be adjusted to reflect the average of the three highest amounts of the unit's total converted control period heat input from control periods one through five of the previous seven control periods. To calculate a unit's converted control period heat input on a modified output basis, the unit's gross electrical output is multiplied by a heat rate conversion factor of 7,900 British thermal units per kilowatt-hour (Btu/kWh) for coal-fired units and 6,675 Btu/kWh for natural gas- and oil-fired units. For cogeneration units, the converted heat input is calculated by converting the available thermal output, in Btu, of useable steam to an equivalent heat input by dividing the thermal output by a general boiler/heat exchanger efficiency of

80%. For combustion turbine cogeneration units, the converted heat input is calculated by first converting the available thermal output of useable steam from the heat recovery steam generator or heat exchanger to an equivalent heat input by dividing the thermal output by a general boiler/heat exchanger efficiency of 80%. Then the electrical generation from the combustion turbine must be added after conversion to an equivalent heat input by multiplying the electrical output by 3,413 Btu/kWh. The sum yields the total equivalent heat input for the combustion turbine cogeneration unit.

The adopted allocation methodology distributes 90.5% of the Texas NO_x trading budget to each CAIR NO_x unit with a baseline heat input determined under §101.506(a) or (b)(2) or (3) in proportion to each CAIR NO_x unit's share of baseline heat input to the total baseline heat input for all CAIR NO_x units with a baseline heat input determined under §101.506(a) or (b)(2) or (3). For units that commence operation on or after January 1, 2001, and that have not established a historical baseline heat input in accordance with §101.506(b)(2) or (3), CAIR NO_x allowances are allocated from the new unit set-aside beginning with the later of the 2009 control period or the first control period after the control period in which the new unit commences commercial operation. The adopted allocation methodology requires the executive director to distribute CAIR NO_x allowances from the new unit set-aside upon receipt of a request from the CAIR designated representative for the CAIR NO_x unit. Submittal of each request for a CAIR NO_x allowance allocation from the new unit set-aside is required on or before July 1 of the first control period for which the request is being made and after the date that the CAIR NO_x unit commences commercial operation. CAIR NO_x allowances requested from the new unit set-aside will not be allocated in excess of the new unit's total tons of NO_x emissions reported to EPA for the previous control period. On or after July 1 of each control period, the executive director shall review

each CAIR NO_x allowance allocation request, determine the sum of all CAIR NO_x allowance allocation requests, and allocate CAIR NO_x allowances from the new unit set-aside for the control period. If the amount of CAIR NO_x allowances in the new unit set-aside is greater than or equal to the sum of all CAIR NO_x allowances requested, then the executive director shall allocate the amount of CAIR NO_x allowances requested. If the amount of CAIR NO_x allowances in the new unit set-aside is less than the sum of all CAIR NO_x allowances requested, then the executive director shall allocate to each new CAIR NO_x unit an amount of CAIR NO_x allowances in proportion to the amount of CAIR NO_x allowances requested by a CAIR NO_x unit to the total amount of CAIR NO_x allowances requested by all CAIR NO, units. In the adopted allocation methodology, new units begin receiving allowances from the set-aside for the control period immediately following the control period in which the new unit commences commercial operation based on the unit's emissions reported for the previous control period. Therefore, a CAIR NO_x source operating a new unit is required to hold allowances covering the emissions from the new unit for the control period in which the new unit commences commercial operation, but will not receive an allocation for that control period. CAIR NO_x allowance allocations for a new unit in subsequent control periods will continue to be based on the unit's emissions from the previous control period until the unit establishes a baseline in accordance with §101.506(b)(2) or (3). In response to comments, the commission has added new subsection (g) specifying a deadline for units completing their first five years of commercial operation to certify with the executive director the data needed to establish a baseline heat input under §101.506(b)(2) or (3). The new subsection requires the gross electrical output of the generator or generators served by the unit and total heat energy of any steam produced by the unit to be submitted in writing to the executive director by the latter of July 1, 2011, or July 1 of the control period immediately following the unit's fifth consecutive year of

commercial operation. This deadline provides an adequate amount of time for the CAIR designated representative to submit the relevant data and for the executive director to determine the CAIR NO_x allocations from the general NO_x trading budget and the new unit set-aside prior to the applicable EPA allocation submittal deadlines.

Due to the timing requirements under §101.504 for submittal of CAIR NO_x allowance allocations to EPA, a new unit completing its first five years of commercial operation and establishing its baseline under §101.506(b)(2) or (3) by the end of the 2010 control period will begin receiving a CAIR NO_x allowance allocation from the general NO_x trading budget beginning with the 2015 control period. Based on the requirements of HB 2481, beginning with the 2016 control period, and for the control period beginning every five years thereafter, a new unit must complete its first five consecutive years of operation prior to the end of the revised five-year baseline period in order to receive an allocation from the general NO_x trading budget. For example, to receive an allocation from the general NO_x trading budget for the 2016 control period, a new unit must complete its first five consecutive years of operation by the end of the 2014 control period. The new unit will then begin receiving CAIR NO_x allowances from the general NO_x trading budget beginning with the 2016 control period based on the average of the three highest amounts of the unit's converted control period heat input during the 2009 - 2014 control periods. All CAIR NO_x allowance allocations under the adopted allocation methodology are rounded to the nearest whole allowance.

New §101.506 allows for the distribution of any unallocated CAIR NO_x allowances remaining in the new unit set-aside for a given control period to CAIR NO_x units with a historical baseline heat input

receiving an allocation under \$101.506(c). These existing units will each receive an additional allocation proportional to the ratio of their original allocation to the state's existing unit allocation, 90.5% of the Texas NO_x trading budget. This distribution is performed by multiplying the amount of unallocated CAIR NO_x allowances remaining in the set-aside by each CAIR NO_x unit's allocation determined under \$101.506(c), divided by 90.5% of the Texas NO_x trading budget, and rounded to the nearest whole allowance.

The adopted new §101.506 also requires, for the purposes of determining CAIR NO_x allowance allocations, a CAIR NO_x unit's control period heat input, status as coal-fired or natural gas-fired, and total tons of NO_x emissions during a calendar year to be determined in accordance with 40 CFR Part 75, to the extent the unit was otherwise subject to those requirements for the year. If a CAIR NO_x unit was not otherwise subject to the requirements of 40 CFR Part 75 for the year, the unit's control period heat input, status as coal-fired or natural gas-fired, and total tons of NO_x emissions during a calendar year will be based on the best available data reported to the executive director.

Section 101.508, Compliance Supplement Pool

New §101.508 outlines the requirements for the allocation of additional CAIR NO_x allowances for the 2009 control period from the compliance supplement pool for Texas provided under 40 CFR §96.143. As promulgated on May 12, 2005, 40 CFR §96.143 provides Texas with an additional 772 CAIR NO_x allowances under the compliance supplement pool. The adopted rule allows the compliance supplement pool allowances to be distributed to those CAIR NO_x units that achieve early NO_x reductions in 2007 and 2008, beyond any applicable state or federal emission limitation during those

years. CAIR NO_x units seeking an additional allocation from the compliance supplement pool for early NO_x reductions in 2007 and 2008 are required to monitor and report the unit's NO_x emission rate and heat input in accordance with the continuous emissions monitoring and reporting requirements under 40 CFR Part 96, Subpart HH for the entire control period in which the early reductions are being generated. The CAIR designated representative is required to submit to the executive director by July 1, 2009, a request for an allocation of CAIR NO_x allowances from the compliance supplement pool in an amount not to exceed the sum of the CAIR NO_x unit's emission reductions, in tons, during 2007 and 2008, that were not necessary to comply with any state or federal emission limitation applicable during those years.

In addition, new \$101.508 provides for the allocation of additional CAIR NO_x allowances from the compliance supplement pool for CAIR NO_x units whose compliance with the CAIR NO_x annual trading program in the 2009 control period will create undue risk to the reliability of electricity supply during 2009. The CAIR designated representative is required to submit to the executive director by July 1, 2009, a request for an allocation of CAIR NO_x allowances from the compliance supplement pool in an amount not to exceed the minimum amount of CAIR NO_x allowances necessary to remove the risk to the reliability of electricity supply. In such requests, the CAIR designated representative is required to demonstrate that in the absence of the additional allocation to the unit, the unit's compliance with the CAIR NO_x annual trading program during the 2009 control period will create an undue risk to electric reliability during 2009. This demonstration is required to show that it would not be feasible to obtain a sufficient amount of electricity from other electric generation facilities or obtain a sufficient amount of

CAIR NO_x allowances from the compliance supplement pool by making early NO_x reductions in 2007 and 2008.

The executive director shall review each request for an additional allocation from the compliance supplement pool and, if approved, allocate CAIR NO_x allowances for the 2009 control period to CAIR NO_x units covered by a request. If the amount of CAIR NO_x allowances in the compliance supplement pool is greater than or equal to the sum of all CAIR NO_x allowances requested, then the executive director shall allocate the amount of CAIR NO_x allowances requested. If the amount of CAIR NO_x allowances in the compliance supplement pool is less than the sum of all CAIR NO_x allowances requested, then the executive director shall allocate to each CAIR NO_x unit covered under a request an amount of CAIR NO_x allowances in proportion to the amount of CAIR NO_x allowances requested by a CAIR NO_x unit to the total amount of CAIR NO_x allowances requested by all CAIR NO_x units. The adopted rule requires the executive director to determine and submit to EPA by November 30, 2009, the CAIR NO_x allowance allocations from the compliance supplement pool.

FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the adopted rulemaking in light of the regulatory impact analysis requirements of Texas Government Code, §2001.0225, and determined that the adopted rulemaking meets the definition of a "major environmental rule" as defined in that statute. A "major environmental rule" means a rule, the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure, and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public

health and safety of the state or a sector of the state. The adopted rulemaking does not, however, meet any of the four applicability criteria for requiring a regulatory impact analysis for a major environmental rule, which are listed in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225, applies only to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law.

The adopted new rules are an incorporation by reference of the federal CAIR. The CAIR includes EPA-administered emissions trading programs that will be governed by model rules provided in the CAIR, which states may incorporate by reference. The EPA found that Texas is among several states that contribute significantly to nonattainment of the NAAQS for PM_{2.5} in downwind states. The EPA is requiring these upwind states to revise their SIPs to include control measures to reduce emissions of SO₂ and/or NO_x, which are precursors to PM_{2.5} formation. Reducing upwind precursor emissions will assist downwind PM_{2.5} nonattainment areas to achieve the NAAQS in a more equitable, cost-effective manner than if those areas implemented local emissions reductions alone. The EPA has specified the amount of each state's required reductions, but each state has flexibility to choose the measures by which it achieves them. If states choose to control EGUs, then they must establish a budget or cap for those sources. The CAIR defines the EGU budgets for the affected states if the states choose to control only EGUs or if they choose to control other sources to achieve some or all of their reductions. States

may adopt the CAIR NO_x model allowance allocation methodology or choose an alternative method to allocate the state budget of NO_x emissions allowances to sources in the state.

Specifically, the adopted rulemaking would incorporate by reference the CAIR model emissions trading rules located in 40 CFR Part 96, Subpart AA - Subpart II, and Subpart AAA - Subpart III. In addition, the rulemaking adopts an alternative NO_x allowance allocation methodology for Texas CAIR NO_x sources in lieu of the model rule methodology in 40 CFR Part 96, Subpart EE. The adopted rulemaking fulfills the requirements of HB 2481, enacted by the 79th Legislature, to incorporate CAIR by reference; to adopt an alternate NO_x allowance allocation methodology; to specify the sources to which the trading program is applicable; to set the timing requirements to report annual unit allocations to EPA; to detail the operation of the compliance supplement pool; to specify that a percentage of the state's annual allocation will be set-aside for new units; and to provide that allowances will be available at no cost.

The incorporation of CAIR requires emission reductions from certain new and existing stationary, fossil fuel-fired electric utility units, including boilers and combustion turbines, and certain cogeneration units that meet specific applicability criteria. The adopted incorporation of the federal rule is intended to protect the environment and to reduce risks to human health and safety from environmental exposure by reducing NO_x and SO₂ emissions from upwind states so that downwind states may reach attainment of the NAAQS for PM_{2.5}. The CAIR includes revisions to the Acid Rain Program regulations under FCAA, Title IV, particularly the regulatory provisions governing the SO₂ cap and trade program. The revisions streamline the operation of the Acid Rain SO₂ cap and trade

program and facilitate its interaction with the CAIR trading program. While the required emissions reductions of these programs are based on controls that are known to be highly cost-effective for EGUs, the requirements may have adverse impacts on certain utilities, which could be considered a sector of the economy. The exact cost to each unit cannot be predicted, but significant costs to comply with the emission reductions programs may be expected for at least some units that install or upgrade emission controls or that purchase allowances. While the adopted rulemaking is intended to protect human health and the environment, it may adversely affect in a material way sources in the state that fall under the applicability requirements in the federal rule. Cost and benefits of the CAIR were analyzed by EPA during the federal notice and comment rulemaking for the CAIR. CAIR is a required federal program, and the ability of states to modify its requirements is limited.

The adopted rulemaking implements the requirements of the FCAA. Under 42 United States Code (USC), §7410(a)(2)(D), each SIP must contain adequate provisions prohibiting any source within the state from emitting any air pollutant in amounts that will contribute significantly to nonattainment of the NAAQS in any other state. While 42 USC, §7410 generally does not require specific programs, methods, or reductions in order to meet the standard, SIPs must include "enforceable emission limitations and other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this chapter" (42 USC, Chapter 85, Air Pollution Prevention and Control). The provisions of the FCAA recognize that states are in the best position to determine what programs and controls are necessary or appropriate in order to meet the NAAQS. This flexibility allows states, affected industry, and the public, to

collaborate on the best methods for attaining the NAAQS for the specific regions in the state. Even though the FCAA allows states to develop their own programs, this flexibility does not relieve a state from developing a program that meets the requirements of 42 USC, §7410. States are not free to ignore the requirements of 42 USC, §7410, and must develop programs to assure that their contributions to nonattainment areas are reduced so that these areas can be brought into attainment on schedule. Additionally, states have further obligations under 42 USC, §7410(a)(2)(D), to address interstate transport of pollutants that contribute significantly to nonattainment in, or interfere with maintenance by, another state. In the CAIR, EPA found that 28 states and the District of Columbia contribute significantly to nonattainment of the PM_{2.5} or eight-hour ozone NAAQS in downwind areas. The EPA is requiring these upwind states to revise their SIPs to include control measures to reduce emissions of SO₂ and/or NO_x, with limited flexibility. Adoption of the federal CAIR and participation in its emissions cap and trade approach for annual SO₂ and NO_x emissions to reduce downwind PM_{2.5} is the method the state has chosen to achieve those reductions in a flexible and cost-effective manner.

The requirement to provide a fiscal analysis of proposed regulations in the Texas Government Code was amended by Senate Bill (SB) 633 during the 75th Legislature, 1997. The intent of SB 633 was to require agencies to conduct a regulatory impact analysis of extraordinary rules. These are identified in the statutory language as major environmental rules that will have a material adverse impact and will exceed a requirement of state law, federal law, or a delegated federal program, or are adopted solely under the general powers of the agency. With the understanding that this requirement would seldom apply, the commission provided a cost estimate for SB 633 that concluded "based on an assessment of rules adopted by the agency in the past, it is not anticipated that the bill will have significant fiscal

implications for the agency due to its limited application." The commission also noted that the number of rules that would require assessment under the provisions of the bill was not large. This conclusion was based, in part, on the criteria set forth in the bill that exempted proposed rules from the full analysis unless the rule was a major environmental rule that exceeds a federal law.

As discussed earlier in this preamble, the FCAA does not always require specific programs, methods, or reductions in order to meet the NAAQS; thus, states must develop programs for each area contributing to nonattainment to help ensure that those areas will meet the attainment deadlines. Because of the ongoing need to address nonattainment issues, and to meet the requirements of 42 USC, §7410, the commission routinely proposes and adopts SIP rules. The legislature is presumed to understand this federal scheme. If each rule proposed for inclusion in the SIP was considered to be a major environmental rule that exceeds federal law, then every SIP rule would require the full regulatory impact analysis contemplated by SB 633. This conclusion is inconsistent with the conclusions reached by the commission in its cost estimate and by the Legislative Budget Board (LBB) in its fiscal notes. Since the legislature is presumed to understand the fiscal impacts of the bills it passes, and that presumption is based on information provided by state agencies and the LBB, the commission believes that the intent of SB 633 was only to require the full regulatory impact analysis for rules that are extraordinary in nature. While the SIP rules will have a broad impact, that impact is no greater than is necessary or appropriate to meet the requirements of the FCAA. For these reasons, rules adopted for inclusion in the SIP fall under the exception in Texas Government Code, §2001.0225(a), because they are required by federal law.

The commission has consistently applied this construction to its rules since this statute was enacted in 1997. Since that time, the legislature has revised the Texas Government Code, but left this provision substantially unamended. It is presumed that "when an agency interpretation is in effect at the time the legislature amends the laws without making substantial change in the statute, the legislature is deemed to have accepted the agency's interpretation." (*Central Power & Light Co. v. Sharp*, 919 S.W.2d 485, 489 (Tex. App. Austin 1995), writ denied with per curiam opinion respecting another issue, 960 S.W.2d 617 (Tex. 1997); Bullock v. Marathon Oil Co., 798 S.W.2d 353, 357 (Tex. App. Austin 1990, no writ). Cf. Humble Oil & Refining Co. v. Calvert, 414 S.W.2d 172 (Tex. 1967); Dudney v. State Farm Mut. Auto Ins. Co., 9 S.W.3d 884, 893 (Tex. App. Austin 2000); Southwestern Life Ins. Co. v. Montemayor, 24 S.W.3d 581 (Tex. App. Austin 2000, pet. denied); and Coastal Indust. Water Auth. v. Trinity Portland Cement Div., 563 S.W.2d 916 (Tex. 1978)).

The commission's interpretation of the regulatory impact analysis requirements is also supported by a change made to the Texas Administrative Procedure Act (APA) by the legislature in 1999. In an attempt to limit the number of rule challenges based upon APA requirements, the legislature clarified that state agencies are required to meet these sections of the APA against the standard of "substantial compliance." The legislature specifically identified Texas Government Code, §2001.0225, as falling under this standard. The commission has substantially complied with the requirements of Texas Government Code, §2001.0225.

The specific intent of the adopted rulemaking is to protect the environment and to reduce risks to human health by adoption of the federal CAIR by reference, and to specify some components of the

rulemaking does not exceed a standard set by federal law or exceed an express requirement of state law. No contract or delegation agreement covers the topic that is the subject of this adopted rulemaking. Finally, this adopted rulemaking was not developed solely under the general powers of the agency, but is required by THSC, TCAA, §382.0173. Therefore, this adopted rulemaking is not subject to the regulatory analysis provisions of Texas Government Code, §2001.0225(b), because although the adopted rulemaking meets the definition of a "major environmental rule," it does not meet any of the four applicability criteria for a major environmental rule.

TAKINGS IMPACT ASSESSMENT

The commission evaluated the adopted rulemaking and performed an assessment of whether Texas Government Code, Chapter 2007, is applicable. The specific purpose of the adopted rulemaking is to incorporate by reference the federal CAIR emissions trading rules located in 40 CFR Part 96, Subpart AA - Subpart II and Subpart AAA - Subpart III, and to specify some components of the trading program for which the federal rule allows for flexibility of choice by the state. The 79th Legislature enacted HB 2481, which created a requirement in THSC, TCAA, §382.0173 to adopt the federal CAIR program rules by reference. Texas Government Code, §2007.003(b)(4), provides that Texas Government Code, Chapter 2007 does not apply to this adopted rulemaking because it is an action reasonably taken to fulfill an obligation mandated by federal law and by state law.

In addition, the commission's assessment indicates that Texas Government Code, Chapter 2007 does not apply to these adopted rules because this is an action that is taken in response to a real and

substantial threat to public health and safety; that is designed to significantly advance the health and safety purpose; and that does not impose a greater burden than is necessary to achieve the health and safety purpose. Thus, this action is exempt under Texas Government Code, §2007.003(b)(13). EPA promulgated the CAIR rule to reduce NO_x and SO₂ emissions from upwind states so that downwind states may reach attainment of the NAAQS for PM_{2.5}. The adopted rules will enable Texas to implement the federal emissions budget and trading program and impose its requirements on new and existing fossil fuel-fired electric utility units, ultimately ensuring reductions of NO_x and SO₂ emissions. The action will specifically advance the health and safety purpose by reducing PM_{2.5} levels through an emissions cap and gradual reductions in emissions of NO_x and SO₂. The rules specifically target a category of sources with significant NO_x and SO₂ emissions, and through the cap and trade program support cost-effective control strategies. Consequently, the adopted rulemaking meets the exemption criteria in Texas Government Code, §2007.003(b)(4) and (13). For these reasons, Texas Government Code, Chapter 2007 does not apply to this adopted rulemaking.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission determined that this rulemaking action relates to an action or actions subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 *et seq.*), and the commission rules in 30 TAC Chapter 281, Subchapter B, concerning Consistency with the Texas Coastal Management Program. As required by §281.45(a)(3) and 31 TAC §505.11(b)(2), concerning Actions and Rules Subject to the Coastal Management Program, commission rules governing air pollutant emissions must be consistent with the applicable goals and policies of the CMP. The commission reviewed this action for

consistency with the CMP goals and policies in accordance with the rules of the Coastal Coordination Council, and determined that the action is consistent with the applicable CMP goals and policies. The CMP goal applicable to this rulemaking action is the goal to protect, preserve, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (31 TAC §501.12(I)). No new sources of air contaminants are authorized and the adopted new rules will maintain at least the same level of or increase the level of emissions control as the existing rules. The CMP policy applicable to this rulemaking action is the policy that commission rules comply with federal regulations in 40 CFR, to protect and enhance air quality in the coastal areas (31 TAC §501.32). This rulemaking action complies with 40 CFR Part 51, concerning Requirements for Preparation, Adoption, and Submittal of Implementation Plans. Therefore, in accordance with 31 TAC §505.22(e), the commission affirms that this rulemaking action is consistent with CMP goals and policies.

EFFECT ON SITES SUBJECT TO THE FEDERAL OPERATING PERMITS PROGRAM

The requirements of 42 USC, §7410 are applicable requirements of 30 TAC Chapter 122. Facilities that are subject to the Federal Operating Permit Program will be required to obtain, revise, reopen, and renew their federal operating permits as appropriate in order to include CAIR.

PUBLIC COMMENT

The commission conducted public hearings on the proposed rules on April 11, 2006, in Austin; April 12, 2006, in Fort Worth; and April 13, 2006, in Houston. During the public comment period, which closed at 5:00 p.m., April 17, 2006, the commission received comments from American Electric

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules

Rule Project No. 2005-046-101-EN

Power (AEP); American Wind Energy Association (AWEA); Association of Electric Companies of

Texas, Inc. (AECT); Austin Physicians for Social Responsibility (APSR); Blue Skies Alliance;

Calpine; Clean Water Action (CWA); Entergy Services Inc. (Entergy); EPA; Environment Texas;

FPL Group (FPL); Gulf Coast Lignite Coalition (GCLC); League of Women Voters of Texas (LWV);

Lone Star Chapter of Sierra Club (Lone Star Sierra Club); NRG Texas (NRG); Public Citizen;

Representative Dennis Bonnen (District 25); Senator Ken Armbrister (District 18); Sierra Club of

Dallas-Fort Worth (DFW Sierra Club); Sierra Club - Houston Regional Group (Houston Sierra Club);

Southwestern Public Services (SPS); Suez Energy Generation NA, Inc. (SEGNA); Texas Association

of Business (TAB); Texas Impact; Texas Mining and Reclamation Association (TMRA); The

Sustainable Energy and Economic Development Coalition (SEED); TXU Power (TXU); and 139

individuals.

NRG supported comments submitted by GCLC; TMRA supported comments submitted by AECT and

GCLC; GCLC supported comments submitted by TMRA and AECT; and Entergy supported comments

submitted by AECT.

TXU, Entergy, AECT, and SPS concurred with Representative Bonnen's comments.

RESPONSE TO COMMENTS

FEDERAL APPROVABILITY

EPA commented that the proposed SIP and rule language for the submittal of CAIR NO_x allocations by

the state to EPA under §101.504 do not meet the federal deadline requirements under 40 CFR

§51.123(o)(2)(ii). EPA commented that with the current proposed rule language, EPA could only conditionally approve the Texas CAIR rule and SIP, and the SIP and rule language would need to align with the federal deadline requirement to receive final federal approval.

The commission appreciates the comment, and is aware that the CAIR NO_x allocation time line adopted in this rule does not meet the federal time line requirements in the revised final CAIR rule that was published in the *Federal Register* on April 28, 2006. The commission has been directed by the legislature under HB 2481 to adopt the proposed time line. Commission staff are in the process of notifying legislators that the directive in HB 2481 will not accommodate the requirements of the revised final federal CAIR program.

EPA commented that participation in the federal CAIR trading programs for NO_x and SO₂ requires the adoption of rules substantively identical to the 2006 revised CAIR model trading rules. If the commission cannot adopt the CAIR model rule revisions promulgated in 2006, EPA will consider a conditional approval of these rules. The necessary revisions include: incorporating by reference the revisions to 40 CFR Part 96 Subparts AA - II and Subparts AAA - III; updating references to the applicability of CAIR and the definition of an electric generating unit or cogeneration unit; incorporating the revisions to the CAIR designated representative; revising the proposed allocation methodology under \$101.504(c) to address amendments to 40 CFR \$96.141; and revising the figures in \$101.506(b)(2)(C) and (b)(3)(C) to use "3,413 Btu/kWh" to be consistent with revisions to 40 CFR \$96.142. EPA also commented that the commission would need to incorporate the changes to the Acid

Rain program at 40 CFR Parts 72 - 74 and 78 as published in the *Federal Register* on April 28, 2006 to interact seamlessly with CAIR.

The commission appreciates the comment, and is aware that subsequent rule changes regarding the revised final CAIR that were published in the Federal Register on April 28, 2006, will need to be incorporated into the Texas rules and CAIR SIP in order to receive final federal approval. The commission anticipates initiating rulemaking and a SIP revision proposing to incorporate these needed changes in the near future.

RENEWABLE ENERGY SET-ASIDE

AWEA, Public Citizen, SEED, Blue Skies Alliance, and Lone Star Sierra Club commented that the adopted rules should include a set-aside for renewable energy. AWEA recommended a method to incorporate renewable energy into the proposed CAIR NO_x allocation methodology under \$101.506, and provided information from the State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials regarding model alternative allocation methodology for renewable energy. The suggested method would provide a direct allocation of NO_x allowances for renewable energy technologies as new sources using the modified output-based approach. Renewable energy sources in operation for less than five years would receive an allocation from the new unit set-aside by multiplying their generation output by a standard allocation rate of 1.5 pounds of NO_x per megawatt hour. Renewable energy sources in operation for five or more years would receive an allocation from the general pool by converting their generation output to heat input using the proposed heat rate for non-coal units of 6,675 Btu/kWh. In addition, the AWEA commented

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules

Rule Project No. 2005-046-101-EN

that the proposed new unit set-aside of 9.5% should be altered to adequately accommodate future growth estimates, including growth for renewable resources. In addition, one individual commented that the commission should promote renewable energy and energy conservation.

The rules have not been revised in response to these comments. HB 2481, 79th Legislature, 2005, directed the commission to incorporate by reference the federal CAIR model trading rule and make permanent allocations that are reflective of the NO_x allocation requirements of 40 CFR Part 96, Subpart AA - Subpart HH. Under 40 CFR §96.104, the CAIR trading program only applies to fossil fuel-fired electric generating units with a nameplate capacity greater than 25 MWe and producing electricity for sale. The methodology outlined under 40 CFR Part 96, Subpart EE and the specific direction given under HB 2481 limit the methodology for determining NO_x allocations to fossil fuel-fired electric generating units only. Since renewable energy is not classified as fossil fuel-fired electric generation, the commission does not have the authority to adopt CAIR rules that include a set-aside for renewable energy. Additionally, HB 2481 directed the commission to maintain a NO_x set-aside for new units, as defined by 40 CFR Part 96, Subparts AA - HH, equal to 9.5% of the Texas CAIR NO_x budget. The commission may not alter the amount of the set-asides provided by statute in the manner suggested by the commenter.

The commission does, however, support the promotion of renewable energy and energy conservation through pollution prevention programs.

MORE STRINGENT CONTROLS

Public Citizen, SEED, Blue Skies Alliance, Lone Star Sierra Club, Environment Texas, and 42 individuals commented that HB 2481 provides the commission the authority in implementing the federal CAIR program to require more stringent NO_x and SO₂ controls than those in the federal rules. Entergy, AECT, GCLC, NRG, TXU, TMRA, and SPS commented that HB 2481 does not provide the commission with the authority in implementing the federal CAIR program to impose more stringent NO_x and SO₂ control requirements than those required under the federal rule. Public Citizen, SEED, Blue Skies Alliance, DFW Sierra, Lone Star Sierra Club, and 49 individuals commented that the proposed rules should be modified to require more stringent NO_x reductions than the federal rules. Entergy, AECT, GCLC, NRG, TXU, TMRA, FPL, and SPS opposed any revisions to the rule imposing more stringent NO_x and SO₂ reduction requirements than those required under the federal rule. Public Citizen, SEED, Blue Skies Alliance, and Lone Star Sierra Club requested that the proposed rules be adopted with lower emissions caps and emission rates for NO_x and SO₂, and that NO_x emissions from East Texas be capped at no more than 100,000 tons per year and at a rate not to exceed 0.05 pounds of NO_x/MMBtu for coal-fired EGUs.

The commission has made no changes in response to these comments. The legislature, during the 79th Legislature, 2005, enacted HB 2481, which requires Texas to participate in the EPA-administered interstate cap and trade program for NO_x emissions and annual SO₂ emissions by incorporating the federal CAIR by reference. HB 2481 also provided that its provisions applied only while the federal rules were enforceable and that its provisions did not limit the authority of the commission to implement more stringent emissions control requirements. As indicated in the

proposal preamble, the commission interprets these requirements together in order to provide effect to the expressed intent of the legislature. Specifically, the commission continues to interpret the language of new THSC, §382.0173(d) as not restricting existing authority to require further emission control requirements, but not to interfere with, or change, the requirements of the CAIR NO_x or SO₂ emission trading programs. The legislature expressed clear intent that the commission implement the CAIR emission trading program by requiring the incorporation by reference of the CAIR program rules as promulgated by EPA, and requiring the use of EPAspecified allocation methodology, with some exceptions for CAIR NO, allowances. Requiring more stringent NO₂ reductions than required by the federal CAIR would not correspond with the statutory requirement to incorporate the CAIR by reference, which specifies the emission budgets for NO, and SO,. Similarly, adopting lower emission caps and emission rates for NO, and SO, generally, and providing for a specific cap and emission rate for East Texas NO_x emissions would be out of line with the flexibility provided for in the federal CAIR, and thus prescribed by the legislature. The federal CAIR provides flexibility in complying with NO_x and SO₂ reduction requirements through the unrestricted banking of excess allowances and the trading of allowances between EGUs in affected CAIR states under common caps. By requiring the commission to incorporate the federal rules by reference, the commission must also incorporate the emission budgets contained in the federal CAIR model trading rules.

Representative Dennis Bonnen and Senator Armbrister commented that the legislature did not intend HB 2481, §2 to be interpreted to allow more stringent emission control requirements in the TCEQ rules adopting the federal CAIR.

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules

Rule Project No. 2005-046-101-EN

The commission appreciates the information provided by Representative Bonnen and Senator Armbrister.

LWV commented that a 90% reduction in NO_x and SO_2 is an achievable goal, that public health is of primary importance, and that a 90% reduction in NO_x and SO_2 would be more protective than the proposed reductions.

The rules have not been revised in response to this comment. While the commission agrees that 90% reductions in NO_x and SO_2 emissions would provide more reductions than proposed, the commission has not assessed whether a 90% reduction in NO_x and SO_2 emissions is achievable as part of this rulemaking. HB 2481, 79th Legislature, 2005, specifically directed the commission to adopt and incorporate by reference 40 CFR Part 96, Subparts AA - II and Subparts AAA - III and specified the methodology for the allocation of CAIR NO_x allowances. Therefore, the commission does not have the authority to require additional emission reductions from EGUs within the scope of implementing CAIR.

Seventy-six individuals requested that the time line for NO_x and SO_2 reductions be accelerated to require reductions from EGUs to be met by 2010. GCLC and TMRA commented that the commission should reject any request to accelerate the time line for complying with the proposed NO_x and SO_2 reductions due to the technical and logistical constraints with retrofitting the appropriate control equipment on existing lignite-fired units. GCLC and TMRA further commented that NO_x and SO_2 emission reductions that cannot be met with technically feasible and commercially demonstrated

technology threaten the continued viability of lignite as a part of the electric generation fuel mix. GCLC and TMRA also commented that suggestions that a 70% NO_x and SO₂ reduction can be achieved by 2008 are incorrect. GCLC and TMRA state that in developing the federal rules, EPA determined the CAIR time lines while considering such factors as availability of controls and the logistics associated with retrofitting existing equipment, and specifically projected that it would take at least 3 years to install certain types of pollution control technology.

The rules have not been revised in response to these comments. Under HB 2481, 79th Legislature, 2005, the commission was directed to incorporate by reference 40 CFR Part 96, Subparts AA - II and Subparts AAA - III. The commission must adhere to the time lines established by the EPA in the federal CAIR model trading rule for NO_x under Subparts AA - II, and for SO₂ under Subparts AAA - III. Under the federal rules, the CAIR NO_x program begins in 2009 and the SO₂ portion begins in 2010. The commission does not have the authority to accelerate these time lines for EGUs.

GCLC commented that compliance with CAIR in Texas will result in a significant additional contribution to air quality from the Texas EGU community, which has already made extraordinary efforts in achieving the lowest state NO_x emission rate of any coal burning state. In developing the federal CAIR rules, EPA determined the final CAIR emissions caps while considering several factors, including: performance, applicability, availability, cost effectiveness, and logistics of various available control technologies. GCLC commented that EPA's consideration of these factors in the federal CAIR indicate that suggestions regarding the feasibility of 70% NO_x and SO₂ emission reductions by 2008 are

not grounded in fact, and are incorrect. Lastly, GCLC notes that EPA estimated that for CAIR Phase I, 39.6 gigawatts (GW) of capacity would need to be retrofitted with flue gas desulfurization and that 23.9 GW would need to be retrofitted with select catalytic reduction; and that for Phase II, 32.4 GW would need to be retrofitted with flue gas desulfurization and 26.6 GW would need to be retrofitted with select catalytic reduction.

The commission has made no change in response to this comment. The commission acknowledges that compliance with CAIR may result in additional emission reductions from Texas EGUs. Based on EPA's predictions, by 2010 Texas EGUs will reduce SO₂ emissions by 31% or 180,000 tons and by 2015 a total of 39% by or 226,000 tons. Texas EGUs are also predicted to reduce NO_x by 21% or 44,000 tons by 2009 and by 2015 a total of 25% or 52,000 tons of NO_x will be reduced. It is also important to note that since Texas will be participating in the EPA-administered cap and trade program for CAIR, reductions could be higher if EGUs elect to overcontrol beyond their CAIR budgets or could be less if EGUs choose to purchase CAIR allowances for compliance.

Houston Sierra Club commented that CAIR should be implemented in Texas as specified by the legislature via an incorporation by reference of the federal CAIR model trading rule. However, through the commission's authority to protect public health, welfare, safety, and the environment, the commission should require through future rulemaking further reductions so that the total NO_x and SO_2 budget for Texas equates to an 80% to 90% reduction in NO_x and SO_2 emissions.

The commission has made no changes in response to this comment. Decisions regarding future rulemaking activities must be properly made in those future actions, after public notice and comment.

DALLAS -FORT WORTH AIR QUALITY

Public Citizen, SEED, Blue Skies Alliance, and Lone Star Sierra Club commented that they disagree with the commission's finding in the proposal rule preamble that there will be no cost to local governments in implementing these rules and that if big emission reductions aren't made here, then far more expensive emissions reductions will have to be made in order to bring the Dallas-Fort Worth area and other nonattainment areas in Texas into attainment with the eight-hour ozone NAAQS, which will shift enormous costs to local governments and their citizens.

The commission has made no change in response to the comment. As discussed elsewhere in this preamble, the legislature has directed the commission to implement the mandatory federal CAIR program. The commission is not required to assess possible indirect consequences, including fiscal implications, for units of local government in its fiscal analysis. The commission did note that "local governments owning EGUs with a nameplate capacity of more than 25 MWe used to produce electricity for sale may experience adverse fiscal implications as a result of the proposed new rules." In addition, the commission notes that the fiscal analysis considers the costs to local governments from administration and enforcement of the proposed rules. Potential future costs to local governments relating to the administration and enforcement of other NO_x emission reduction strategies are beyond the scope of this rulemaking.

APSR, CWA, Texas Impact, and 46 individuals requested that the proposed rules be adopted requiring 70% NO_x and SO₂ reductions in order to assist the Dallas-Fort Worth area in meeting health-based standards for air quality. Public Citizen, SEED, Blue Skies Alliance, DFW Sierra Club, Lone Star Sierra Club, and 45 individuals commented that NO_x and SO₂ emissions from coal-fired EGUs in East Texas are impacting attainment of the national ambient air quality standard for ozone in the Dallas-Fort Worth area. Public Citizen further commented that adopting lower CAIR limits (cap on East Texas emissions at no more than 100,000 tons per year and at a rate for coal plants not to exceed .05 pounds per MMBtu) is critical to making progress toward attainment of the eight-hour ozone NAAQS in the Dallas-Fort Worth area, and to providing health benefits in other areas of Texas. Public Citizen provided an analysis of the effect of CAIR reductions on the Dallas-Fort Worth area. Public Citizen also commented that new power plants currently being proposed and the governor's executive order expediting permitting for those plants further complicates the ability to bring the Dallas-Fort Worth area into attainment for the eight-hour ozone NAAQS. Public Citizen commented that if the proposed rules are not modified to assure that air quality is protected, additional and far more costly retrofit will be required of newly permitted plants. Public Citizen commented that the cost per ton of controlling NO_x from power plants is approximately \$900 to \$1,500 per ton, which is possibly one of the least expensive forms of NO_x control. Public Citizen commented that Dallas-Fort Worth and other areas are facing loss of federal highway funds and other economic sanctions if they fail to meet clean air standards. Public Citizen provided a presentation to the commission entitled "CAIR Limits Matter." The presentation discussed concerns about DFW air quality and attainment of the national ambient air quality standards. The presentation also focused on putting more stringent controls for NO_x in place through CAIR.

Texas Commission on Environmental Quality

Chapter 101 - General Air Quality Rules

Rule Project No. 2005-046-101-EN

The rules have not been revised in response to these comments. The federal CAIR requires

upwind states to revise their SIPs to include control measures to reduce emissions of SO, and

NO_x. Reducing upwind precursor emissions will assist downwind PM_{2.5} and eight-hour ozone

nonattainment areas in achieving the PM_{2.5} and eight-hour ozone NAAQS. The federal CAIR is

specifically intended to address the transport of emissions over the eastern portion of the United

States, and its focus is directed at the reduction of upwind precursors, not at the attainment of a

local area within Texas, specifically the Dallas-Fort Worth area. The commission is currently

developing eight-hour ozone attainment demonstrations for the Dallas-Fort Worth and Houston-

Galveston-Brazoria nonattainment areas, that will likely include a number of proposed control

measures and will provide opportunity for public comment.

One individual commented with concerns about the episodes chosen for ozone modeling in the DFW

area and the wind directions on the specific days that were modeled.

The commission made no changes in response to this comment. The adoption of rules to

implement the federal CAIR trading program is independent of SIP development for individual

nonattainment areas that must develop SIPs to attain the NAAQS. Ozone attainment modeling

concerns are beyond the scope of this rulemaking.

MISCELLANEOUS

EPA suggests clarification of the date for a CAIR NO_x source to report a unit's gross electrical output

under proposed §101.506(b).

The rules have been revised based on this comment to specify a deadline of July 1, 2011, or July 1 of the control period immediately following the end of the unit's fifth consecutive year of commercial operation, whichever is later. This deadline will provide an adequate amount of time for the CAIR designated representative to submit the relevant data and for the executive director to determine the CAIR NO_x allocations from the general NO_x trading budget and the new unit set-aside prior to the applicable EPA allocation submittal deadlines.

EPA also provided comments regarding typographical errors. First, on page 1-1, section 1.2 of the CAIR SIP narrative, EPA noted that the proposed language incorrectly identified the citation for the state budgets established under the federal CAIR. Texas must meet the state budget for annual NO_x emissions established in 40 CFR §51.123(e)(2) and the state budget for annual SO₂ emissions established in 40 CFR §51.124(e)(2). Second, on page 1-2 of the CAIR SIP narrative, the proposed language referenced only 40 CFR Part 96, Subpart AA instead of Subparts AA - II for NO_x and Subpart AAA instead of Subparts AAA - III for annual SO₂ emissions. Third, on page 5-5 of the CAIR SIP narrative, the proposed language refers to 40 CFR Part 97, instead of Part 96 for the CAIR designated representative. Lastly, EPA and AECT commented that the proposed rule language under \$101.508(a) references 40 CFR §96.140 instead of 40 CFR §96.143.

The commission appreciates the comments and has made changes to reflect the federal CAIR requirements accurately. In addition, the rules have been revised to reference the correct citation to 40 CFR §96.143 under §101.508(a).

AECT commented that the proposed June 1 deadline under $\S101.504(a)(2)$ - (4) for the executive director to submit CAIR NO_x allocations to EPA should be revised on the basis that historically the Acid Rain data that would be used to determine the proper NO_x allocations is not available until well after June 1. AECT recommends revising the submittal deadline to October 31 of each control period as opposed to June 1.

The commission revised the rules based on this comment to require submittal to EPA of CAIR NO_x allocations determined under \$101.506(c) by October 31. The intent of the proposed rule was to determine CAIR NO_x allocations for future control periods based on final data reported to EPA for compliance with the Acid Rain Program. The commission understands that preliminary Acid Rain data is typically available by June 1, however, this data may be revised prior to being finalized. The revision to the rule also provides for consistency between the submittal deadlines under \$101.504(a)(1) and (a)(2) - (4).

AECT commented that the proposed rule language under §101.506(b)(2) specifies one method to calculate the baseline heat input for every control period starting with the 2015 control period, while proposed §101.506(b)(3) specifies a different method to calculate baseline heat input for the 2016 control period and for every fifth control period thereafter. AECT notes that either of the two calculation methods could be used to calculate baseline heat input for the 2016 control period and for every fifth control period thereafter and could presumably result in two different baseline heat inputs being calculated for any of those control periods. AECT recommends one of two revisions to correct this situation. Either revise proposed §101.506(b)(1) to apply to the 2009 - 2015 control periods and

delete proposed $\S101.506(b)(2)$ or revise proposed $\S101.506(b)(2)$ to only apply to the 2015 control period. Lastly, AECT comments that HB 2481 does not prohibit these changes, since THSC, $\S382.0173(c)(1)$ does not state that the allocation of new units' NO_x allowances for the 2015 control period cannot also be made from the special reserve for new units.

The commission has revised the rules based on this comment to delete the phrase "and for every control period thereafter" from proposed §101.506(b)(2). The revised rule specifies a baseline heat input for the 2015 control period for units commencing operation on or after January 1, 2001, and operating for a period of five or more consecutive years, calculated as the average of the three highest amounts of total converted control period heat input over the first five years of operation.

GCLC commented that the proposed NO_x allocation methodology accurately implements HB 2481 by setting aside allowances for new sources and requiring reductions from new and existing EGUs but not from other sources. NRG commented that the proposed rules reasonably reflect the emission allocations and time lines specified in the federal CAIR model rule, as directed by HB 2481. Calpine commented that the proposed rules incorporate modifications to the federal CAIR contemplated in HB 2481. TMRA commented that it supports the commission's efforts to adopt state rules that conform to the federal CAIR and that reflect the intent and specific requirements of HB 2481. AECT commented that the proposed rules are consistent overall with the federal CAIR and HB 2481, §2. SPS commented that the proposed rules are consistent with the federal CAIR and HB 2481.

The commission appreciates the support.

SPS requested that the commission include in the adopted rules an express contingency provision to automatically exclude West Texas from CAIR in the event that West Texas is excluded from participation in the federal CAIR program.

The commission has made no change in response to this comment. HB 2481, 79th Legislature, 2005, directed the commission to incorporate by reference the federal CAIR model trading rule and to make permanent allocations that are reflective of the allocation requirements of 40 CFR Part 96, Subpart AA - Subpart HH as issued by EPA on May 12, 2005. These requirements include EGUs from West Texas. HB 2481 directed the commission to "take all reasonable and appropriate steps to exclude West Texas from the federal CAIR rule," . . . "including filing a petition for reconsideration with" EPA (Texas Health and Safety Code, §382.0173(f)). The commission submitted such a Petition for Reconsideration to EPA on July 11, 2005, but EPA denied the petition (See 71 FR 25304 (April 28, 2006)). Meanwhile, the inclusion of West Texas in CAIR has been challenged in federal court by the City of Amarillo and a number of West Texas sources. This challenge has been consolidated with other claims related to CAIR (See North Carolina et al. v. EPA, Case No. 05-01244 (District of Columbia Circuit)). The commission is not participating in this litigation. While the proposed provision may be consistent with the legislature's intent, and may promptly remove West Texas from the CAIR in the event the pending litigation succeeds or EPA otherwise decides to remove West Texas from the CAIR, there was no opportunity for public notice and comment on this provision. The commission is

anticipating further rulemaking, as discussed elsewhere in this preamble, to incorporate changes to the federal CAIR that were recently finalized; and may include such a provision in this future proposal.

Houston Sierra Club commented that the commission should calculate the specific NO_x and SO_2 reductions for Texas based on the allocated Phase I and Phase II budgets so that the public can easily understand their significance for the proposed rule. Houston Sierra Club calculated that the NO_x budget would require a 16.67% reduction, and the SO_2 budget would require a 30% reduction by Phase II.

The commission appreciates the comment, and acknowledges that the federal CAIR is a complex rule, but has made no changes in response to this comment. Based on the state NO_x and SO₂ budgets provided to Texas under the federal CAIR rule, EPA has predicted the NO_x and SO₂ reductions associated with CAIR compliance. According to EPA's predictions, CAIR compliance will result in a NO_x reduction of 21% in Texas or 44,000 tons by 2009 and a total of 25% or 52,000 tons by 2015. It is also predicted that by 2010 Texas EGUs will reduce SO₂ emissions by 31% or 180,000 tons and by 2015 a total of 39% or 226,000 tons. However, it is important to note that because Texas will be participating in the EPA-administered cap and trade program for CAIR, reductions could be higher if EGUs elect to over-control (reduce emissions greater than necessary for compliance in order to bank allowances for trading purposes) or the reductions could be less if EGUs choose to purchase CAIR allowances to stay in compliance instead of installing controls. Market-based emission cap and trade systems, like the federal CAIR, provide

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules

Rule Project No. 2005-046-101-EN

flexibility to comply with emission reduction requirements through unrestricted banking of excess allowances (held by companies that over-control) and trading of allowances (sold by companies that over-control to companies that need to purchase allowances to stay in compliance).

Houston Sierra Club commented that the discussion of the CAIR proposal is difficult to understand and the commission should simplify its explanation of the rule so that the public can understand what is being proposed and the implications of the proposal.

The commission appreciates the comment, and acknowledges that the federal CAIR is a complex rule, but has made no changes in response to this comment. Due to the complexity of the federal CAIR rule, and the requirement under HB 2481 to incorporate the federal CAIR by reference, the adopted rule is also complex. Although the language may be cumbersome, it maintains the continuity of the federal CAIR rule within the state's rules. Information regarding the federal CAIR is available at EPA's Web site, http://www.epa.gov/interstateairquality/. The commission also has information regarding the federal CAIR and its implementation in Texas available at the TCEQ Web site, http://www.tceq.state.tx.us/implementation/air/sip/caircamr.html.

Houston Sierra Club commented that it is of great concern that the TCEQ is not taking a stronger stand against the harmful effects of particulates, mercury, sulfates and nitrogen oxides; and that it is unacceptable and shameful that two of Texas' most beautiful and magnificent natural landscapes, Big Bend National Park and Guadalupe Mountains National Park too often look like a bad pollution day in Houston.

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules

Rule Project No. 2005-046-101-EN

The commission has made no change in response to this comment. Concerns regarding particulates and mercury are beyond the scope of this rulemaking; and controls on sulfates and nitrogen oxides more stringent than those provided for by the federal CAIR are prohibited by HB 2481, as discussed elsewhere in this response to comments.

LWV and GHASP commented that effects screening levels (ESLs) should be set at enforceable levels based on what is in the airshed now and what might be added in the future in order to protect public health.

The commission made no changes in response to this comment. The adopted rules are designed to implement the federal CAIR program and not to develop ESLs. Nitrogen dioxide and sulfur oxides are currently regulated by federal national ambient air quality standards. Therefore, ESLs are not developed for these compounds.

Seventy-four individuals commented that the announcement of the public hearings for the proposed rulemaking should have been broadcast on local news stations to increase public awareness.

The commission has made no changes in response to this comment. The commission has complied with the requirements for public hearings and notification under 40 CFR §51.102 and §60.23, Texas Government Code, Subchapter B, Chapter 2001, and under THSC, TCAA, §382.017. The commission strives to give all citizens of Texas appropriate prior notification and opportunity to comment, including the ability to submit written comments. Hearing notices for

Rule Project No. 2005-046-101-EN

these rules were published in the following newspapers: Austin American-Statesman, March 9, 2006; Corpus Christi Caller-Times, March 8, 2006; El Paso Times, March 8, 2006; Fort Worth Star-Telegram, March 8, 2006; Houston Chronicle, March 8, 2006; and the Midland Reporter-Telegram, March 8, 2006. In addition, on March 9, 2006, a media release was posted to the TCEQ Web site and faxed to radio and television stations and daily and weekly newspapers in the Austin, Dallas-Fort Worth, and Houston markets. The release was also delivered on March 9, 2006, via the media relations listserve, to which anyone may subscribe (see "email alerts" under News Releases on the TCEQ Web site). The commission has no control over the conditions under which media choose to publish or broadcast the content of these releases.

SUBCHAPTER H: EMISSIONS BANKING AND TRADING

DIVISION 7: CLEAN AIR INTERSTATE RULE

§§101.501 - 101.504, 101.506, 101.508

STATUTORY AUTHORITY

The new sections are adopted under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code; and under THSC, §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA. The new sections are also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; §382.012, concerning State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air; §382.014, concerning emission inventory; §382.016, concerning Monitoring Requirements; HB 2481, §2 of the 79th Legislature, codified at §382.0173, concerning adoption of rules regarding certain SIP requirements and standards of performance for certain sources; and §382.054, concerning federal operating permits; and FCAA, 42 USC, §§7401 et seq., which requires states to include in their SIPs adequate provisions prohibiting any source within the state from emitting any air pollutant in amounts that will contribute significantly to nonattainment, or interfere with maintenance of, the NAAQS in any other state.

The adopted new sections implement THSC, §§382.002, 382.011, 382.012, 382.014, 382.016, HB 2481, §2 of the 79th Legislature, codified at §382.0173, and §382.054; and FCAA, 42 USC, §§7401 *et seq*.

§101.501. Applicability.

This division applies to any stationary, fossil fuel-fired boiler or stationary, fossil fuel-fired combustion turbine meeting the applicability requirements under 40 Code of Federal Regulations Part 96, Subpart AA or Subpart AAA.

§101.502. Clean Air Interstate Rule Trading Program.

- (a) The commission incorporates by reference, except as specified in this division, the provisions of 40 Code of Federal Regulations (CFR) Part 96, Subpart AA Subpart II and Subpart AAA Subpart III (as amended through May 12, 2005 (70 FR 25162)) for purposes of implementing the Clean Air Interstate Rule trading programs for annual emissions of oxides of nitrogen and sulfur dioxide to meet the requirements of Federal Clean Air Act, §110(a)(2)(D).
- (b) Owners and operators of sources subject to 40 CFR Part 96, Subpart AA Subpart II or Subpart AAA Subpart III shall comply with those requirements.

(c) The methodologies and procedures for determining and recording each subject source's Clean Air Interstate Rule oxides of nitrogen allowance allocation in 40 CFR Part 96, Subpart EE are replaced by the requirements of this division.

§101.503. Clean Air Interstate Rule Oxides of Nitrogen Annual Trading Budget.

- (a) The oxides of nitrogen (NO_x) trading budget for annual allocations of Clean Air Interstate Rule NO_x allowances for the control periods in 2009 2014 and in 2015, and thereafter, shall be equivalent to the tons of NO_x emissions listed for Texas in the state trading budget under 40 Code of Federal Regulations §96.140.
- (b) A total amount of Clean Air Interstate Rule NO_x allowances equal to 9.5% of the NO_x trading budget identified under subsection (a) of this section must be set-aside for allocation to new units.

§101.504. Timing Requirements for Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations.

(a) The executive director shall submit to the United States Environmental Protection Agency (EPA) the Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_x) allowance allocations determined in accordance with §101.506(c) of this title (relating to Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations) by the following dates:

- (1) October 31, 2006, for the 2009 2014 control periods;
- (2) October 31, 2011, for the 2015 control period;
- (3) October 31, 2014, for the 2016 control period; and
- (4) 14 months prior to the beginning of each applicable control period for the control period beginning in 2017 and for each control period thereafter.
- (b) For the control period beginning in 2009, and for each control period thereafter, the executive director shall submit to EPA the CAIR NO_x allowance allocations determined in accordance with \$101.506(d) and (e) of this title by October 31 of the applicable control period.
- (c) If the executive director fails to submit to EPA the CAIR NO_x allowance allocations in accordance with subsection (a) of this section, EPA will assume that the allocations of CAIR NO_x allowances for the applicable control period are the same as for the control period that immediately precedes the applicable control period, except that, if the applicable control period is in 2015, EPA will assume that the allocations equal 83% of the allocations for the control period that immediately precedes the applicable control period.
- (d) If the executive director fails to submit to EPA the CAIR NO_x allowance allocations in accordance with subsection (b) of this section, EPA will assume that no CAIR NO_x allowances are to

be allocated, for the applicable control period, to any CAIR NO_x unit that would otherwise be allocated CAIR NO_x allowances under §101.506(d) and (e) of this title.

§101.506. Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations.

- (a) For units commencing operation before January 1, 2001:
- (1) for each control period in 2009 2015, the baseline heat input, in million British thermal units (MMBtu), is the average of the three highest amounts of the unit's adjusted control period heat input for 2000 2004 with the adjusted control period heat input for each year calculated as follows:
- (A) if the unit is coal-fired during the year, the unit's control period heat input for such year is multiplied by 90%;
- (B) if the unit is natural gas-fired during the year, the unit's control period heat input for such year is multiplied by 50%; and
- (C) if the unit is not subject to subparagraph (A) or (B) of this paragraph, the unit's control period heat input for such year is multiplied by 30%.

- (2) for the control period beginning January 1, 2016, and for the control period beginning every five years thereafter, the baseline heat input must be adjusted to reflect the average of the three highest amounts of the unit's adjusted control period heat input from control periods one through five of the preceding seven control periods with the adjusted control period heat input for each year calculated as follows:
- (A) if the unit is coal-fired during the year, the unit's control period heat input for such year is multiplied by 90%;
- (B) if the unit is natural gas-fired during the year, the unit's control period heat input for such year is multiplied by 50%; and
- (C) if the unit is not subject to subparagraph (A) or (B) of this paragraph, the unit's control period heat input for such year is multiplied by 30%.
 - (b) For units commencing operation on or after January 1, 2001:
- (1) for each control period in 2009 2014, Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_x) allowances must be allocated from the new unit set-aside identified under §101.503(b) of this title (relating to Clean Air Interstate Rule Oxides of Nitrogen Annual Trading Budget) and determined in accordance with subsection (d) of this section;

- (2) for the control period beginning January 1, 2015 for units operating each calendar year during a period of five or more consecutive years, the baseline heat input is the average of the three highest amounts of the unit's total converted control period heat input over the first such five years. The converted control period heat input for each year is calculated as follows:
- (A) except as provided in subparagraph (B) or (C) of this paragraph, the converted control period heat input equals the control period gross electrical output of the generator or generators served by the unit multiplied by 7,900 British thermal units per kilowatt-hour (Btu/kWh), if the unit is coal-fired for the year, or 6,675 Btu/kWh, if the unit is not coal-fired for the year, and divided by 1,000,000 Btu/MMBtu. If a generator is served by two or more units, then the gross electrical output of the generator must be attributed to each unit in proportion to the unit's share of the total control period heat input of such units for the year;
- (B) for a unit that is a boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the converted heat input is the total heat energy (in Btu) of the steam produced by the boiler during the control period, divided by 0.8 and converted to MMBtu by dividing by 1,000,000 Btu/MMBtu; or
- (C) for a unit that is a combustion turbine and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through

the sequential use of energy, the converted heat input is determined using the equation in the following figure.

Figure: 30 TAC §101.506(b)(2)(C)

$$HI = \left[\left(O \times 3,414 \, Btu/kWh \right) + \left(\frac{HE}{0.8} \right) \right] \div 1,000,000 \, Btu/MMBtu$$

Where:

Btu = British thermal units

HE = the total heat energy, in Btu, of the steam produced by any associated heat

recovery steam generator during the control period.

HI = the converted heat input, in MMBtu, of the combustion turbine cogeneration

unit.

kWh = kilowatt-hour

MMBtu = million British thermal units

O = the gross electrical output during the control period of the enclosed device

comprising the compressor, combustor, and turbine.

(3) for the control period beginning January 1, 2016, and for the control period beginning every five years thereafter, for units operating each calendar year during a period of five or more consecutive years, the baseline heat input shall be adjusted to reflect the average of the three highest amounts of the unit's converted control period heat input from control periods one through five

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules

Rule Project No. 2005-046-101-EN

of the preceding seven control periods. The converted control period heat input for each year is calculated as follows:

- (A) except as provided in subparagraph (B) or (C) of this paragraph, the converted control period heat input equals the control period gross electrical output of the generator or generators served by the unit multiplied by 7,900 Btu/kWh, if the unit is coal-fired for the year, or 6,675 Btu/kWh, if the unit is not coal-fired for the year, and divided by 1,000,000 Btu/MMBtu, provided that if a generator is served by two or more units, then the gross electrical output of the generator must be attributed to each unit in proportion to the unit's share of the total control period heat input of such units for the year;
- (B) for a unit that is a boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the converted control period heat input equals the total heat energy (in Btu) of the steam produced by the boiler during the control period, divided by 0.8 and converted to MMBtu by dividing by 1,000,000 Btu/MMBtu; or
- (C) for a unit that is a combustion turbine and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the converted control period heat input is determined using the equation in the following figure.

Figure: 30 TAC §101.506(b)(3)(C)

$$HI = \left[\left(O \times 3,414 \, Btu/kWh \right) + \left(\frac{HE}{0.8} \right) \right] \div 1,000,000 \, Btu/MMBtu$$

Where:

Btu = British thermal units

HE = the total heat energy, in Btu, of the steam produced by any

associated heat recovery steam generator during the control period.

HI = the converted heat input, in MMBtu, of the combustion turbine

cogeneration unit.

kWh = kilowatt-hour

MMBtu = million British thermal units

O = the gross electrical output during the control period of the enclosed

device comprising the compressor, combustor, and turbine.

(c) For units with a baseline heat input calculated under subsection (a) or (b)(2) or (3) of this section, CAIR NO_x allowances must be allocated according to the equation in the following figure.

Figure: 30 TAC §101.506(c)

$$A = \frac{HI}{\sum_{i=1}^{n} HIi} \times B$$

Where:

A = the amount of Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_x) allowances allocated to a CAIR NO_x unit rounded to the nearest whole allowance.

i = each CAIR NO_x unit qualifying for an allocation under this subsection.

n = the total number of CAIR NO_x units qualifying for an allocation under this subsection.

HI = the baseline heat input for a CAIR NO_x unit qualifying for an allocation under this subsection as calculated under subsection (a) or (b)(2) or (3) of this section.

B = a total amount of CAIR NO_x allowances equal to 90.5% of the NO_x trading budget identified in subsection(a) of this section, except as provided in subsection (e) of this section.

- (d) For units commencing operation on or after January 1, 2001, and that have not established a baseline heat input in accordance with subsection (b)(2) or (3) of this section, CAIR NO_x allowances must be allocated according to the following.
- (1) Beginning with the later of the control period in 2009 or the first control period after the control period in which the CAIR NO_x unit commences commercial operation and until the first control period for which the unit is allocated CAIR NO_x allowances under subsection (c) of this section, CAIR NO_x allowances must be allocated from the new unit set-aside identified under \$101.503(b) of this title. For the first control period in which a CAIR NO_x unit commences commercial operation, such CAIR NO_x unit will not receive a CAIR NO_x allocation from the new unit set-aside.
- (2) To receive a CAIR NO_x allowance allocation from the new unit set-aside, the CAIR designated representative shall submit to the executive director a written request on or before July 1 of the first control period for which the CAIR NO_x allowance allocation is requested and after the date that the CAIR NO_x unit commences commercial operation.
- (3) In a CAIR NO_x allowance allocation request under paragraph (2) of this subsection, the amount of CAIR NO_x allowances requested for a control period must not exceed the CAIR NO_x unit's total tons of NO_x emissions reported to EPA for the calendar year immediately preceding such control period.

- (4) The executive director shall review each CAIR NO_x allowance allocation request submitted in accordance with this subsection and shall allocate CAIR NO_x allowances for each control period as follows.
- (A) The executive director shall accept a CAIR NO_x allowance allocation request only if the request meets, or is adjusted as necessary to meet, the requirements of this subsection.
- (B) On or after July 1 of the control period, the executive director shall determine the sum of all accepted CAIR NO_x allowance allocation requests for the control period.
- (C) If the amount of CAIR NO_x allowances in the new unit set-aside for the control period is greater than or equal to the sum under subparagraph (B) of this paragraph, then the executive director shall allocate the full amount of CAIR NO_x allowances requested to each CAIR NO_x unit covered under a CAIR NO_x allowance allocation request that was accepted by the executive director.
- (D) If the amount of CAIR NO_x allowances in the new unit set-aside for the control period is less than the sum under subparagraph (B) of this paragraph, then the executive director shall allocate CAIR NO_x allowances to each CAIR NO_x unit covered under a CAIR NO_x allowance allocation request accepted by the executive director according to the equation in the following figure.

Figure: 30 TAC §101.506(d)(4)(D)

$$A = \frac{RQ}{\sum_{i=1}^{n} RQi} \times SA$$

Where:

A = the amount of Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_x) allowances, rounded to the nearest whole allowance, allocated to each CAIR NO_x unit covered under a CAIR NO_x allowance allocation request accepted by the executive director.

i = each CAIR NO_x allowance allocation request accepted by the executive director.

n = the total number of CAIR NO_x allowance allocation requests accepted by the executive director.

RQ = the amount of the CAIR NO_x allowances requested, as adjusted under subparagraph (A) of this paragraph, for each CAIR NO_x unit covered under a CAIR NO_x allowance allocation request accepted by the executive director.

SA = the total amount of CAIR NO_x allowances in the new unit set-aside identified under \$101.503(b) of this title (relating to Clean Air Interstate Rule Oxides of Nitrogen Annual Trading Budget).

(E) The executive director shall notify each CAIR designated representative who submitted a CAIR NO_x allowance allocation request of the amount of CAIR NO_x allowances, if any, allocated for the control period to the CAIR NO_x unit covered under the request.

- (e) If, after completion of the procedures under subsection (d) of this section for a control period, any unallocated CAIR NO_x allowances remain in the new unit set-aside for the control period, the executive director shall allocate to each CAIR NO_x unit receiving an allocation under subsection (c) of this section an amount of CAIR NO_x allowances equal to the total amount of such remaining unallocated CAIR NO_x allowances, multiplied by the unit's allocation under subsection (c) of this section, divided by 90.5% of the NO_x trading budget identified in subsection (a) of this section, and rounded to the nearest whole allowance as appropriate.
- (f) A unit's control period heat input, and a unit's status as coal-fired or natural gas-fired, for a calendar year under subsection (a) of this section, and a unit's total tons of NO_x emissions during a calendar year under subsection (d) of this section, must be determined in accordance with 40 Code of Federal Regulations (CFR) Part 75, to the extent the unit was otherwise subject to the requirements of 40 CFR Part 75 for the year, or must be based on the best available data reported to the executive director for the unit, to the extent the unit was not otherwise subject to the requirements of 40 CFR Part 75 for the year.
- (g) On or before the latter of July 1, 2011, or July 1 of the control period immediately following a unit's fifth complete, consecutive year of commercial operation, the CAIR designated representative of a unit establishing a baseline heat input in accordance with subsection (b)(2) or (3) of this section shall submit, on a form specified by the executive director, written certification of the gross electrical output of the generator or generators served by the unit and the total heat energy of any steam produced by the unit during the first five years of commercial operation.

§101.508. Compliance Supplement Pool.

- (a) In addition to the Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_x) allowances allocated under §101.506 of this title (relating to Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations), the executive director may allocate for the control period in 2009 up to the amount of CAIR NO_x allowances listed as the compliance supplement pool for Texas under 40 Code of Federal Regulations (CFR) §96.143.
- (b) For any CAIR NO_x unit that achieves NO_x emission reductions in 2007 and 2008 that are not necessary to comply with any state or federal emissions limitation applicable during such years, the CAIR designated representative of the unit may request early reduction credits and allocation of CAIR NO_x allowances from the compliance supplement pool under subsection (a) of this section for such early reduction credits, in accordance with the following.
- (1) The owners and operators of such CAIR NO_x unit shall monitor and report the NO_x emissions rate and the heat input of the unit in accordance with 40 CFR Part 96, Subpart HH for the entire control period for which early reduction credit is requested.
- (2) The CAIR designated representative of such CAIR NO_x unit shall submit to the executive director by July 1, 2009, a written request for allocation of an amount of CAIR NO_x allowances from the compliance supplement pool not exceeding the sum of the amounts, in tons, of the unit's NO_x emission reductions in 2007 and 2008 that are not necessary to comply with any state or

federal emissions limitation applicable during such years, determined in accordance with 40 CFR Part 96, Subpart HH.

- (c) For any CAIR NO_x unit whose compliance with the CAIR NO_x emissions limitation for the control period in 2009 would create an undue risk to the reliability of electricity supply during such control period, the CAIR designated representative of the unit may request the allocation of CAIR NO_x allowances from the compliance supplement pool under subsection (a) of this section, in accordance with the following.
- (1) The CAIR designated representative of such CAIR NO_x unit shall submit to the executive director by July 1, 2009, a written request for allocation of an amount of CAIR NO_x allowances from the compliance supplement pool not exceeding the minimum amount of CAIR NO_x allowances necessary to remove such undue risk to the reliability of electricity supply.
- (2) In the request under subsection (c)(1) of this section, the CAIR designated representative of such CAIR NO_x unit shall demonstrate that, in the absence of allocation to the unit of the amount of CAIR NO_x allowances requested, the unit's compliance with CAIR NO_x emissions limitation for the control period in 2009 would create an undue risk to the reliability of electricity supply during such control period. This demonstration must include a showing that it would not be feasible for the owners and operators of the unit to:

- (A) obtain a sufficient amount of electricity from other electricity generation facilities, during the installation of control technology at the unit for compliance with the CAIR NO_x emissions limitation, to prevent such undue risk; or
- (B) obtain under subsections (b) and (d) of this section, or otherwise obtain, a sufficient amount of CAIR NO_x allowances to prevent such undue risk.
- (d) The executive director shall review each request under subsections (b) or (c) of this section submitted by July 1, 2009, and shall allocate CAIR NO_x allowances for the control period in 2009 to CAIR NO_x units covered by such request as follows.
- (1) The executive director shall make any necessary adjustments to the request to ensure that the amount of the CAIR NO_x allowances requested meets the requirements of subsections (b) or (c) of this section.
- (2) If the total amount of CAIR NO_x allowances in all requests, as adjusted under paragraph (1) of this subsection, is less than the amount of allowances in the compliance supplement pool under subsection (a) of this section, the executive director shall allocate to each CAIR NO_x unit covered by a request the amount of CAIR NO_x allowances requested, as adjusted under paragraph (1) of this subsection.

(3) If the total amount of CAIR NO_x allowances in all requests, as adjusted under paragraph (1) of this subsection, is more than the amount of allowances in the compliance supplement pool under subsection (a) of this section, the executive director shall allocate CAIR NO_x allowances to each CAIR NO_x unit covered by a request according to the equation in the following figure.

Figure: 30 TAC §101.508(d)(3)

$$A = \frac{RQ}{\sum_{i=1}^{n} RQi} \times SP$$

Where:

A = the number of Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_x) allowances, rounded to the nearest whole allowance, allocated from the compliance supplement pool to a unit covered under a compliance supplement pool allocation request accepted by the executive director.

i = each compliance supplement pool allocation request accepted by the executive director.

n = the total number of compliance supplement pool allocation requests accepted by the executive director.

RQ = the amount of CAIR NO_x allowances requested for the unit under subsection (b) or (c) of this section, as adjusted under paragraph (1) of this subsection.

SP = the amount of CAIR NO_x allowances in the compliance supplement pool.

(4) By November 30, 2009, the executive director shall determine, and submit to

EPA, the allocations under paragraph (2) or (3) of this subsection.